

CLAIMS

1. An internal gear pump comprising:

an inner rotor formed with "n" external teeth ("n" is a natural number);

an outer rotor formed with (n+1) internal teeth which are engageable with the external teeth;;

and a casing formed with a suction port for drawing fluid and a discharge port for discharging fluid, the fluid being conveyed by drawing and discharging the fluid by changes in volumes of cells formed between tooth surfaces of the inner rotor and the outer rotor while the inner rotor and the outer rotor rotate in engagement with each other,

wherein the internal diameter of a hole formed in the casing for accommodating the inner rotor and the outer rotor is set to be 0.1 mm to 0.6 mm larger than that the external diameter of the outer rotor, and

when "er" is an eccentric distance between the inner rotor and the outer rotor and "eh" is an eccentric distance between the inner rotor and the hole formed in the casing, the following inequality is satisfied:

$$0.005 \text{ mm} \leq (eh - er) \leq 0.030 \text{ mm}$$